

WHAT IS CLAIMED IS:

1. A method for producing power from a heat source comprising the steps of:

a) heating an intermediate fluid with heat from said heat source and producing a vaporized intermediate fluid in an intermediate fluid heater/vaporizer'

b) vaporizing an organic liquid working fluid with heat from the vaporized intermediate fluid in an organic fluid vaporizer to form a vaporized organic working fluid and intermediate fluid condensate;

c) expanding said vaporized organic working fluid in an organic vapor turbine for generating power and producing expanded vaporized organic working fluid;

d) condensing said expanded organic vaporized working fluid to produce an organic fluid condensate; and

e) supplying the organic fluid condensate to the organic fluid vaporizer.

2. A method according to claim 1 wherein prior to supplying said vaporized intermediate fluid to said organic fluid vaporizer said vaporized intermediate fluid is expanded in an intermediate fluid vapor turbine and power is produced.

3. A method according to claim 2 wherein the expansion of the vaporized heated intermediate fluid is achieved by expanding a synthetic, alkylated, aromatic heat transfer fluid.

4. A method according to claim 3 wherein said intermediate fluid condensate is supplied to said intermediate fluid heater/vaporizer.

5. Apparatus for producing power from a heat source comprising:

a) an intermediate fluid heater/vaporizer that heats and vaporizes the intermediate fluid with heat from said heat source and produces a vaporized intermediate fluid;

b) an organic fluid vaporizer that vaporizes an organic liquid working fluid with heat from the vaporized intermediate fluid to form a vaporized organic working fluid and intermediate fluid condensate;

c) an organic vapor turbine that expands said vaporized organic working fluid and generates power and produces expanded vaporized organic working fluid;

d) an organic fluid condenser that condenses said expanded organic vaporized working fluid to produce an organic working fluid condensate so that the organic working fluid condensate is supplied to the organic working fluid vaporizer.

6. Apparatus according to claim 5 including an intermediate fluid vapor turbine that expands said vaporized intermediate fluid prior to supplying it to said organic fluid vaporizer such that said intermediate fluid vapor turbine produces power.

7. Apparatus according to claim 6 wherein said intermediate fluid is comprised of a synthetic, alkylated, aromatic heat transfer fluid.

8. Apparatus according to claim 7 including a pump for supplying said intermediate fluid condensate to said intermediate fluid heater/vaporizer.